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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/549,253	09/12/2005	Michael Anthony Pugel	PU040066	2478
	7590 12/22/200 d, Patent Operations	9	EXAMINER	
THOMSON Lic P.O. Box 5312			HANCE, ROBERT J	
Princeton, NJ 08543-5312			ART UNIT	PAPER NUMBER
			2421	
			MAIL DATE	DELIVERY MODE
			12/22/2009	PAPER

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# BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 10/549,253 Filing Date: September 12, 2005 Appellant(s): PUGEL ET AL.

Daniel E. Sragow For Appellant

**EXAMINER'S ANSWER** 

This is in response to the appeal brief filed 06 October 2009 appealing from the Office action mailed 21 July 2009.

# (1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

# (2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

# (3) Status of Claims

The statement of the status of claims contained in the brief is correct.

## (4) Status of Amendments After Final

No amendment after final has been filed.

# (5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

#### (6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

#### (7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

# (8) Evidence Relied Upon

5,920,801	Thomas	6-1999
6,678,737	Bucher	4-2000
6,466,656	Evans	6-1999

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 2002/0059624
 Machida
 8-2001

 5,191,410
 McCalley
 3-1993

 6.049,717
 Dufour
 4-2000

# (9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

# Claim Rejections - 35 USC § 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claims 1-5, 8, 10-13, 16, 20-24 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thomas, US Patent No. 5,920,801 in view of Bucher, US Patent No. 6,678,737.

As to claim 1 Thomas discloses a server apparatus, comprising:

receiving means for receiving broadcast signals (col. 6 lines 37-56);

first processing means for generating first analog signals responsive to said received signals (Fig. 1: 26, 39 and 7; col. 5 lines 42- 45 – digital signals are modulated onto transmission cable 3 in radio (i.e. analog) form);

second processing means (Fig. 1: 37, 39 and 7) for generating second analog signals responsive to said received signals, wherein said first analog signals are provided to a first client device via a transmission medium connecting said server apparatus and said first client device in response to a first request signal requesting a first desired processed analog signal by identifying a first program and further wherein said second analog signals are provided to a second client device via said transmission medium connecting said server apparatus and said second client device in response to a second request signal requesting a second desired processed analog signal by identifying a second program (col. 6 line 63 – col. 7 line 15 – different program are transmitted to different client devices, where the tuning operation of gateway circuits 29 is performed on request (program selection) from the client devices); and

control means for detecting available frequency bands on said transmission medium, wherein said available frequency bands are used to provide said first analog signals to said first client device and to provide said second analog signals to said second client device, and means for causing said transmission medium to be shared between said processed analog signals and other broadcast signals distributed over said transmission medium (col. 2 lines 16-44; col. 8 lines 19-23).

Thomas fails to disclose that the first analog signals have a different encoding than the second analog signals.

However, in an analogous art, Bucher discloses a home network in which multiple video signals being transmitted to client devices have different encodings (claims 27 and 32).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Thomas with the teachings of Bucher for the advantage of allowing the system to provide video data to client devices requiring different display formats, and making it such that the client devices need not perform the necessary processing to view the video content.

As to claim 2 the combined system of Thomas and Bucher fails to disclose said transmission medium is an RG-59 cable.

However, examiner takes Official Notice that RG-59 cable was a well known and commonly available variety of coaxial cable at the time of the invention. It would have been obvious to one of ordinary skill in the art at the time of the invention to use RG-59 coaxial cable in the invention of Thomas and Bucher. The rationale for this would have been to use a commonly available cable to carry television signals, and to use wired transmission and reception rather than wireless in order to improve the dependability of the system.

As to claim 3 the combined system of Thomas and Bucher disclose the server apparatus of claim 1, wherein said broadcast source includes a satellite source (Thomas Fig. 1: 28; col. 6 lines 42-47).

**As to claim 4** the combined system of Thomas and Bucher fail to disclose the server apparatus of claim 1, wherein said broadcast source includes a digital terrestrial source.

However, Examiner takes official notice of the fact that digital terrestrial sources of broadcast information were well known in the art at the time the invention was made. For example, digital cable TV was widely used. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the combined system of Thomas and Bucher to receive digital broadcasts for the advantage of increased image quality.

**As to claim 5** the combined system of Thomas and Bucher disclose the server apparatus of claim 1, wherein said receiving means processes said received signals to generate a digital transport stream (Thomas col. 7 lines 37-43).

As to claim 8 the combined system of Thomas and Bucher disclose the server apparatus of claim 1, wherein said control means scans a plurality of frequency bands on said transmission medium to detect said available frequency bands (Thomas col. 2 lines 16-44; col. 8 lines 19-33).

As to claim 10 Thomas discloses a method for distributing signals from a server apparatus to a first client device and a second client device, comprising the steps of: receiving signals from a broadcast source (col. 6 lines 37-56);

generating first analog signals responsive to said received signals (Fig. 1: 26, 39 and 7; col. 5 lines 42- 45 – digital signals are modulated onto transmission cable 3 in radio (i.e. analog) form);

generating second analog signals responsive to said received signals, wherein said available frequency band is used to provide said first analog signals to said first client device (col. 2 lines 16-44; col. 8 lines 19-23),

detecting available frequency bands on said transmission medium, wherein said available frequency bands are used to provide said first analog signals to said first client device (col. 2 lines 16-44; col. 8 lines 19-23).

providing said first analog signals to said first client device via said transmission medium connecting said server apparatus and said first client device in response to a first request signal requesting a first desired analog signal by identifying a first program (col. 6 line 63 – col. 7 line 15 – different program are transmitted to different client devices, where the tuning operation of gateway circuits 29 is performed on request (program selection) from the client devices);

detecting available frequency bands on said transmission medium, wherein said available frequency bands are used to provide said second analog signals to said second client device (col. 2 lines 16-44; col. 8 lines 19-23).

providing said second analog signals to said first client device via said transmission medium connecting said server apparatus and said second client device in response to a first request signal requesting a first desired analog signal by identifying a second program (col. 6 line 63 – col. 7 line 15 – different program are transmitted to

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on request (program selection) from the client devices), thereby causing said transmission medium to be shared between said processed analog signals and other broadcast signals distributed over said transmission medium (col. 2 lines 16-44; col. 8 lines 19-23).

Thomas fails to disclose that the first analog signals have a different encoding than the second analog signals.

However, in an analogous art, Bucher discloses a home network in which multiple video signals being transmitted to client devices have different encodings (claims 27 and 32).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Thomas with the teachings of Bucher for the advantage of allowing the system to provide video data to client devices requiring different display formats, and making it such that the client devices need not perform the necessary processing to view the video content.

**As to claim 11** the combined system of Thomas and Bucher fails to disclose that said transmission medium is an RG-59 cable.

However, examiner takes Official Notice that RG-59 cable was a well known and commonly available variety of coaxial cable at the time of the invention. It would have been obvious to one of ordinary skill in the art at the time of the invention to use RG-59 coaxial cable in the invention of Thomas and Bucher. The rationale for this would have

been to use a commonly available cable to carry television signals, and to use wired transmission and reception rather than wireless in order to improve the dependability of the system.

As to claim 12 the combined system of Thomas and Bucher disclose the method of claim 10, wherein said broadcast source includes a satellite source (Thomas Fig. 1: 28; col. 6 lines 42-47).

**As to claim 13** the combined system of Thomas and Bucher fail to disclose the method of claim 10, wherein said broadcast source includes a digital terrestrial source.

However, Examiner takes official notice of the fact that digital terrestrial sources of broadcast information were well known in the art at the time the invention was made. For example, digital cable TV was widely used. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the combined system of Thomas and Bucher to receive digital broadcasts for the advantage of increased image quality.

As to claim 16 the combined system of Thomas and Bucher disclose the method of claim 10, wherein said control means scans a plurality of frequency bands on said transmission medium to detect said available frequency bands (Thomas col. 2 lines 16-44; col. 8 lines 19-33).

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**As to claim 20** Thomas discloses a server apparatus, comprising:

a receiving element operative to receive broadcast signals (col. 6 lines 37-56);

first processing elements operative to generate first analog signals responsive to said received signals (Fig. 1: 26, 39 and 7; col. 5 lines 42- 45 – digital signals are modulated onto transmission cable 3 in radio (i.e. analog) form);

second processing elements (Fig. 1: 37, 39 and 7) operative to generate second analog signals responsive to said received signals;

a controller operative to detecting available frequency bands on said transmission medium, wherein said first analog signals are provided to a first client device via a transmission medium connecting said server apparatus and said first client device in response to a first request signal requesting a first desired processed analog signal by identifying a first program and further wherein said second analog signals are provided to a second client device via said transmission medium connecting said server apparatus and said second client device in response to a second request signal requesting a second desired processed analog signal by identifying a second program (col. 6 line 63 – col. 7 line 15 – different program are transmitted to different client devices, where the tuning operation of gateway circuits 29 is performed on request (program selection) from the client devices), and further wherein said available frequency bands are used to provide said first analog signals to said first client device and to provide said second analog signals to said second client device (col. 2 lines 16-44; col. 8 lines 19-23).

Thomas fails to disclose that the first analog signals have a different encoding than the second analog signals.

However, in an analogous art, Bucher discloses a home network in which multiple video signals being transmitted to client devices have different encodings (claims 27 and 32).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Thomas with the teachings of Bucher for the advantage of allowing the system to provide video data to client devices requiring different display formats, and making it such that the client devices need not perform the necessary processing to view the video content.

**As to claim 21** the combined system of Thomas and Bucher fails to disclose that said transmission medium is an RG-59 cable.

However, examiner takes Official Notice that RG-59 cable was a well known and commonly available variety of coaxial cable at the time of the invention. It would have been obvious to one of ordinary skill in the art at the time of the invention to use RG-59 coaxial cable in the invention of Thomas and Bucher. The rationale for this would have been to use a commonly available cable to carry television signals, and to use wired transmission and reception rather than wireless in order to improve the dependability of the system.

**As to claim 22** the combined system of Thomas and Bucher disclose the apparatus of claim 20, wherein said broadcast source includes a satellite source (Thomas Fig. 1: 28; col. 6 lines 42-47).

As to claim 23 the combined system of Thomas and Bucher fail to disclose the apparatus of claim 20, wherein said broadcast source includes a digital terrestrial source.

However, Examiner takes official notice of the fact that digital terrestrial sources of broadcast information were well known in the art at the time the invention was made. For example, digital cable TV was widely used. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the combined system of Thomas and Bucher to receive digital broadcasts for the advantage of increased image quality.

As to claim 24 the combined system of Thomas and Bucher disclose the server apparatus of claim 20, wherein said receiving means processes said received signals to generate a digital transport stream (Thomas col. 7 lines 37-43).

As to claim 27 the combined system of Thomas and Bucher disclose the server apparatus of claim 20, wherein said control means scans a plurality of frequency bands on said transmission medium to detect said available frequency bands (Thomas col. 2 lines 16-44; col. 8 lines 19-33).

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3. Claims 6-7, 14-15 and 25-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thomas and Bucher as applied to claims 5, 10 and 24 above, and further in view of McCalley et al., US Patent No 5,191,410.

As to claim 6 the combined system of Thomas and Bucher fails to disclose A/V processing means for processing digital transport stream to generate analog baseband signals; and modulating means for modulating said analog baseband signals to generate analog signals.

However, in an analogous art, McCalley et al. disclose A/V processing means for processing digital transport stream to generate analog baseband signals; and modulating means for modulating said analog baseband signals to generate analog signals (Fig. 18; col. 43 lines 36-65).

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of McCalley et al. with that of Thomas and Bucher. The rationale for this would have been to adapt the system of Thomas and Bucher to be compatible with analog television sets, and to avoid having to convert signals within the user devices if analog signals are desired (see Thomas col. 5 lines 52-57).

**As to claim 7** the combined system of Thomas and Bucher disclose the server apparatus of claim 5, wherein said second processing means includes:

encoding means for encoding said digital transport stream to generate encoded digital signals (Bucher claim 27).

The combined system of Thomas and Bucher fail to disclose digital-to-analog converting means for converting said encoded digital signals to analog baseband signals; and modulating means for modulating said analog baseband signals to generate said second analog signals.

However, in an analogous art, McCalley et al. disclose A/V processing means for processing digital transport stream to generate analog baseband signals; and modulating means for modulating said analog baseband signals to generate analog signals (Fig. 18; col. 43 lines 36-65).

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of McCalley et al. with that of Thomas and Bucher. The rationale for this would have been to adapt the system of Thomas and Bucher to be compatible with analog television sets, and to avoid having to convert signals within the user devices if analog signals are desired (see Thomas col. 5 lines 52-57).

As to claim 14 the combined system of Thomas and Bucher disclose the method of claim 10, wherein said step of generating said first analog signals includes processing said received signals to generate a digital transport stream (Thomas col. 7 lines 37-43).

The combined system of Thomas and Bucher fails to disclose processing digital transport stream to generate analog baseband signals; and modulating means for modulating said analog baseband signals to generate analog signals.

However, in an analogous art, McCalley et al. disclose processing digital transport stream to generate analog baseband signals; and modulating said analog baseband signals to generate analog signals (Fig. 18; col. 43 lines 36-65).

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of McCalley et al. with that of Thomas and Bucher. The rationale for this would have been to adapt the system of Thomas and Bucher to be compatible with analog television sets, and to avoid having to convert signals within the user devices if analog signals are desired (see Thomas col. 5 lines 52-57).

As to claim 15 the combined system of Thomas and Bucher disclose the method of claim 10, wherein said step of generating said second analog signals includes the step of:

processing said received signals to generate a digital transport stream (Thomas col. 7 lines 37-43); and

encoding said digital transport stream to generate encoded digital signals (Bucher claim 27).

The combined system of Thomas and Bucher fail to disclose converting said encoded digital signals to analog baseband signals; and modulating said analog baseband signals to generate said second analog signals.

However, in an analogous art, McCalley et al. disclose processing digital transport stream to generate analog baseband signals; and modulating said analog baseband signals to generate analog signals (Fig. 18; col. 43 lines 36-65).

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of McCalley et al. with that of Thomas and Bucher. The rationale for this would have been to adapt the system of Thomas and Bucher to be compatible with analog television sets, and to avoid having to convert signals within the user devices if analog signals are desired (see Thomas col. 5 lines 52-57).

**As to claim 25** the combined system of Thomas and Bucher fails to disclose the server apparatus of claim 24, wherein said first processing elements include:

A/V processing means for processing digital transport stream to generate analog baseband signals; and modulating means for modulating said analog baseband signals to generate analog signals.

However, in an analogous art, McCalley et al. disclose A/V processing means for processing digital transport stream to generate analog baseband signals; and modulating means for modulating said analog baseband signals to generate analog signals (Fig. 18; col. 43 lines 36-65).

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of McCalley et al. with that of Thomas and Bucher.

The rationale for this would have been to adapt the system of Thomas and Bucher to be

compatible with analog television sets, and to avoid having to convert signals within the user devices if analog signals are desired (see Thomas col. 5 lines 52-57).

As to claim 26 the combined system of Thomas and Bucher disclose the server apparatus of claim 24, wherein said second processing means includes:

encoding means for encoding said digital transport stream to generate encoded digital signals (Bucher claim 27).

The combined system of Thomas and Bucher fail to disclose digital-to-analog converting means for converting said encoded digital signals to analog baseband signals; and modulating means for modulating said analog baseband signals to generate said second analog signals.

However, in an analogous art, McCalley et al. disclose A/V processing means for processing digital transport stream to generate analog baseband signals; and modulating means for modulating said analog baseband signals to generate analog signals (Fig. 18; col. 43 lines 36-65).

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of McCalley et al. with that of Thomas and Bucher. The rationale for this would have been to adapt the system of Thomas and Bucher to be compatible with analog television sets, and to avoid having to convert signals within the user devices if analog signals are desired (see Thomas col. 5 lines 52-57).

4. Claims 9, 17 and 28 rejected under 35 U.S.C. 103(a) as being unpatentable over Thomas and Bucher as applied to claims 1, 10 and 20 above, and further in view of Dufour et al., US Patent No 6,049,717.

As to claim 9 the combined system of Thomas and Bucher fail to disclose that said control means detects said available frequency bands based on a user input which selects said available frequency bands.

However, in an analogous art, Dufour et al. disclose a user input which selects available frequency bands (col. 24 line 54 – col. 25 line 16).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the combined system of Thomas and Bucher with the teachings of Dufour et al. The rationale for this would have been to give an operator control over the allocation of signals over the available frequency bands.

As to claim 17 the combined system of Thomas and Bucher fail to disclose that said control means detects said available frequency bands based on a user input which selects said available frequency bands.

However, in an analogous art, Dufour et al. disclose a user input which selects available frequency bands (col. 24 line 54 – col. 25 line 16).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the combined system of Thomas and Bucher with the teachings of

Dufour et al. The rationale for this would have been to give an operator control over the allocation of signals over the available frequency bands.

As to claim 28 the combined system of Thomas and Bucher fail to disclose that said controller detects said available frequency bands based on a user input which selects said available frequency bands.

However, in an analogous art, Dufour et al. disclose a user input which selects available frequency bands (col. 24 line 54 – col. 25 line 16).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the combined system of Thomas and Bucher with the teachings of Dufour et al. The rationale for this would have been to give an operator control over the allocation of signals over the available frequency bands.

#### (10) Response to Argument

Appellant argues on page 11 of the Appeal Brief that the combined system of Thomas and Bucher does not disclose the limitations of claim 1 because "nowhere does Bucher generate signals having different encodings." Examiner respectfully disagrees. Appellant refers to the instant specification as "an example of signals having different encodings". Examiner respectfully asserts that these examples cannot be read into the claim as limitations on what is to be considered "different encodings". Bucher discloses signals transmitted in a plurality of formats, which include SD and HD formats. These signals contain different code due to the fact that they consist of different information.

According to the Random House Dictionary, the word "encode" is defined as "to convert (a message, information, etc) into code." It follows from this definition that an SD signal will have a different encoding from an HD signal, due to the fact that the consist of different code.

According to the instant invention, the "different encodings" arise due to the fact that the signals are of different type: analog or digital (please see the specification of the instant application at page 5, lines 26-21. Note that what is claimed is "different encoding" and not "different modulation"). To consider these to be "different encodings" implies that signals of different formats (signals of different code) can likewise be considered to be of "different encoding". Therefore Bucher discloses signals having different encodings.

Official notice was taken in the rejection of claims 2, 4, 11, 13, 21 and 23 and was not traversed by Appellant. In taking official notice it was stated by Examiner that it was well known in the art at the time of the invention to use RG-59 cables in a television environment. It was also stated that the use of digital terrestrial broadcast television sources was well known in the art at the time of the invention.

Appellants failure to traverse Examiner's assertion of official notice has rendered the well-known in the art statement applied to claims 2, 4, 11, 13, 21 and 23 as admitted prior art. However, as further proof that RG-59 cables in a home network were well known in the art, as was stated in the rejection of claims 2, 11 and 21, Examiner cites Evans et al., US Patent No. 6,466,656, col. 8 lines 13-18. Further, as proof that digital terrestrial broadcast television sources were well known and in the art at the time the

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invention was made, as was stated in the rejection of claims 4, 13 and 23, Examiner

cites Machida et al., US Pub No. 2002/0059624, paragraph 2.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the

Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/ROBERT HANCE/

Examiner, Art Unit 2421

Conferees:

/John W. Miller/

Supervisory Patent Examiner, Art Unit 2421

/Christopher Kelley/ Supervisory Patent Examiner, Art Unit 2424